

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A speed calculation system for calculating a communication speed of a packet that passes through a communication path connecting a transmission node and a reception node, characterized in that:

said transmission node includes:

a grouping means for grouping at least two of [[its]] received packets; and

a transmission means for affixing probe information for uniquely identifying said grouped packet group to each packet of the packet group, and consecutively transmitting the packets, belonging to an identical packet group; and

said reception node includes:

a receiving means for receiving said transmitted packet;

a recording means for recording an arrival time of said received packet;

a determining means for determining whether the probe information is included in said received packet; and

a calculating means for calculating a communication speed based upon a difference between the arrival times of the packets, belonging to an identical packet group as identified by the probe information, among the packets determined to have said probe information included.

2. (Original) The speed calculation system according to claim 1, characterized in that, in a case where said communication path is plural, said transmission means includes further a selecting means for selecting one path from among said plurality of said communication paths.

3. (Original) The speed calculation system according to claim 2, characterized in that said selecting means selects the communication path of which a communication load is small from among said plurality of said communication paths.

4. (Original) The speed calculation system according to claim 1, characterized in that said calculating means is a calculating means for dividing a total bit number of the packets except the packet that arrived firstly, out of the packets, belonging to an identical packet group as identified by the probe information, by a difference between the arrival times, thereby to calculate the communication speed.

5. (Original) The speed calculation system according to claim 1, characterized in that said transmission node further includes a means for generating one dummy packet in a case where, after receiving one packet, the next packet is not received within a predetermined time.

6. (Original) The speed calculation system according to claim 1, characterized in that said transmission node further includes a means for generating at least two dummy packets in a case where the packet is not received within a predetermined time.

7. (Currently Amended) A node of a calculation system for, from a difference between arrival times of consecutively transmitted packets, calculating a speed of the packet, characterized in ~~that said node is a transmission node and this node includes~~ including:

a grouping means for grouping at least two of received packets; and
a transmission means for affixing probe information for uniquely identifying said grouped packet group to each packet of the packet group, and consecutively transmitting the packets, belonging to an identical packet group.

8. (Original) The node according to claim 7, characterized in that, in a case where a communication path is plural, said transmission means further includes a selecting means for selecting one path from among said plurality of said communication paths.

9. (Currently Amended) A node of a calculation system for, from a difference between arrival times of received packets, calculating a speed of the packet, characterized in ~~that said node is a reception node and this node includes~~ including:

a receiving means for receiving the packet;
a recording means for recording the arrival time of said received packet;

a determining means for determining whether probe information for indicating that the packets have been grouped is included in said received packet; and

a calculating means for calculating a communication speed based upon a difference between the arrival times of the packets, belonging to an identical packet group as identified by the probe information, among the packets determined to have said probe information included.

10. (Currently Amended) A speed calculation method for calculating a speed of a packet that passes through a communication path connecting a transmission node and a reception node, characterized in including:

a grouping step of grouping at least two of ~~[[its]]~~ received packets;

a transmission step of affixing probe information for uniquely identifying said grouped packet group to each packet of the packet group, and consecutively transmitting the packets, belonging to an identical packet group;

a receiving step of receiving said transmitted packet and causing a recorder to record an arrival time of this received packet;

a determining step of determining whether the probe information is included in said received packet; and

a calculating step of calculating a communication speed based upon a difference between the arrival times of the packets, belonging to an identical packet group as identified by the probe information, among the packets determined to have said probe information included.

11. (Original) The speed calculation method according to claim 10, characterized in that, in a case where said communication path is plural, said transmission step further includes a selecting step of selecting one path from among said plurality of said communication paths.

12. (Original) The speed calculation method according to claim 11, characterized in that said selecting step is a step of making a selection so that communication loads in said plurality of said communication paths can be dispersed.

13. (Original) The speed calculation method according to claim 10, characterized in that said calculation step is a step of dividing a total bit number of the packets except the packet that arrived firstly, out of the packets, belonging to an identical packet group as identified by the probe information, by a difference between the arrival times, thereby to calculate the communication speed.

14. (Original) The speed calculation method according to claim 10, characterized in further including a step of generating one dummy packet in a case where, after receiving one packet, the next packet is not received within a predetermined time.

15. (Original) The speed calculation method according to claim 10, characterized in further including a step of generating two dummy packets in a case where the packet is not received within a predetermined time.

16. (Currently Amended) A program of a speed calculation system for calculating a speed of a packet that passes through a communication path connecting a transmission node and a reception node, characterized in causing:

said transmission node to function as:

a grouping means for grouping at least two of **[[its]]** received packets; and

a transmission means for affixing probe information for uniquely identifying said grouped packet group to each packet of the packet group, and consecutively transmitting the packets, belonging to an identical packet group; and

said reception node to function as:

a receiving means for receiving said transmitted packet;

a recording means for causing a recorder to record an arrival time of said received packet;

a determining means for determining whether the probe information is included in said received packet; and

a calculating means for calculating a communication speed based upon a difference between the arrival times of the packets, belonging to an identical packet group as

identified by the probe information, among the packets determined to have said probe information included.

17. (Original) The program according to claim 16, characterized in, in a case where said communication path is plural, further causing said transmission means to function as a selecting means for selecting one path from among said plurality of said communication paths.

18. (Original) The program according to claim 17, characterized in causing said selecting means to function so as to make a selection so that communication loads in said plurality of said communication paths can be dispersed.

19. (Original) The program according to claim 16, characterized in causing said calculating means to function as a calculating means for dividing a total bit number of the packets except the packet that arrived firstly, out of the packets, belonging to an identical packet group as identified by the probe information, by a difference between the arrival times, thereby to calculate the communication speed.

20. (Original) The program according to claim 16, characterized in further causing said grouping means to function as a means for generating one dummy packet in a case where, after receiving one packet, the next packet is not received within a predetermined time.

21. (Original) The program according to claim 16, characterized in further causing said grouping means to function as a means for generating two dummy packets in a case where the packet is not received within a predetermined time.

22. (Currently Amended) A program of a node in a calculation system for, from a difference between arrival times of consecutively transmitted packets, calculating a speed of the packet, characterized in, ~~in a case where said node is a transmission node,~~ causing said node to function as:

a grouping means for grouping at least two of received packets; and

a transmission means for affixing probe information for uniquely identifying said grouped packet group to each packet of the packet group, and consecutively transmitting the packets, belonging to an identical packet group.

23. (Original) The program according to claim 22, characterized in, in a case where a communication path is plural, further causing said transmission means to function as a selecting means for selecting one path from among said plurality of said communication paths.

24. (Currently Amended) A program of a node in a calculation system for, from a difference between arrival times of received packets, calculating a speed of the packet, characterized in, ~~in a case where said node is a reception node~~, causing said node to function as:

a recording means for recording the arrival time of the received packet;

a determining means for determining whether probe information for indicating that the packets have been grouped is included in said received packet; and

a calculating means for calculating a communication speed based upon a difference between the arrival times of the packets, belonging to an identical packet group as identified by the probe information, among the packets determined to have said probe information included.

25. (Original) A calculation method of generating and transmitting a dummy packet for calculating a speed to calculate a speed of a packet from a difference between arrival times of the dummy packets, characterized in employing the received packet as a packet for calculating the speed instead of generating said dummy packet.